PATTON Electronics Co.

IPLink™ 2800 Series

VPN Routers

Quick Start Guide

CE

Document Number: **13220U7-001 Rev. D**
Part Number: **07M2800-QS**
Revised: **March 31, 2006**

Sales Office: **+1 (301) 975-1000**
Technical Support: **+1 (301) 975-1007**
E-mail: **support@patton.com**
WWW: **www.patton.com**

WARNING

- **The IPLink contains no user serviceable parts. The equipment shall be returned to Patton Electronics for repairs, or repaired by qualified service personnel.**
- **Mains Voltage: Line voltages are present when the power cord is connected. The mains outlet shall be within 10 feet (3 meters) of the device, shall be easily accessible, and protected by a circuit breaker.**
- **For AC powered units, ensure that the power cable used meets all applicable standards for the country in which it is to be installed, and that it is connected to a wall outlet which has earth ground.**
- **Hazardous network voltages are present in WAN ports, regardless of whether power to the IPLink is ON or OFF. To avoid electric shock, use caution when near WAN ports. When detaching the cables, detach the end away from the IPLink first.**
- **Do not work on the system or connect or disconnect cables during periods of lightning activity.**
- **For units with an external power adapter, the adapter shall be a listed Limited Power Source.**

1.0 Powering up the IPLink

CAUTION

The interconnecting cables shall be acceptable for external use and shall be rated for the proper application with respect to voltage, current, anticipated temperature, flammability, and mechanical serviceability.

Your IPLink comes with one of the following power supply options and power accessories:

- External AC (desktop) adaptors—power cord and AC power adaptor are included
- Internal AC power supply—power cord is included
- Internal DC power supply—no power accessories are included

1.1 Models with external AC adaptors

1. Connect the AC power cord female plug to the AC adaptor provided with your IPLink router.
2. Connect the AC adaptor barrel type connector to the IPLink router.
3. Connect the AC power cord male plug to an AC power outlet (100–240 VAC).

1.2 Models with internal AC power supply

1. Connect the AC power cord female plug directly to the IPLink AC connector.
2. Connect the AC power cord male plug to an AC power outlet (120–240 VAC).

1.3 Models with internal DC power supply

1. Strip insulation 1/4-inch from the wires connecting the power source to the IPLink.
2. Connect the ground terminal from the power source with to the **E** terminal on the IPLink.
3. Connect the negative (-) terminal from the power source with to the **(-)** terminal on the IPLink.
4. Connect the positive (+) terminal from the power source with to the **(+)** terminal on the IPLink.

The *PWR* LED blinks as the IPLink is powering up. When the *PWR* LED stops blinking and remains lit, the IPLink is ready for user configuration.

2.0 Setting the IP address

2.1 Default IP configuration

The factory default IP settings are as follows:

- LAN port(s) (green, ETH 0/1): IP address: 192.168.1.1, netmask: 255.255.255.0
- WAN port (red, ETH 0/0): IP address and netmask: DHCP client
- A DHCP server with address space 192.168.1.10–192.168.1.99 (netmask: 255.255.255.0) is running on the LAN ports
- Both Ethernet ports are pre-configured and active

If these addresses conflict or do not match with your network they must be changed. Contact your network administrator if you are not sure which IP address to use in your installation.

2.2 Connecting to the PC and logging in

1. To access the IPLink configuration, connect a PC with an Ethernet port to one of the LAN ports (green) (see **figure 1**). Use the black Ethernet cable included with your IPLink for this purpose.

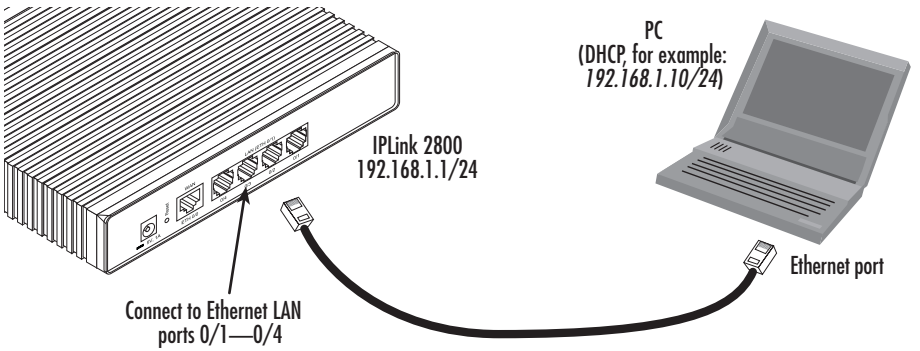

Figure 1. Connecting to the PC's ENET port

2. Set your PC's TCP/IP configuration to DHCP to automatically receive an IP address from the IPLink.

3. Open a Telnet connection to the default LAN IP address of the IPLink (*192.168.1.1*).

   Use the name *administrator* after the login prompt and simply press the **Enter** key after the password prompt.

```
login:administrator
password:
2803/K/EUI>
```

Note The prompt includes the model number of your IPLink (*2803/K/EUI* in the example above) of the WAN (ETH 0/0) port.

4. After you have successfully logged in you are in the operator execution mode, indicated by '>' as command line prompt. With the commands **enable** and **configure** you enter the configuration mode.

```
2803/K/EUI>enable
2803/K/EUI#configure
2803/K/EUI(cfg)#
```

2.3 Changing the IP address

When you connect the WAN interface *eth 0/0*, the WAN port operates as a DHCP client and acquires its IP address/netmask from the WAN network's DHCP server. However you can change the configuration of the *Eth 0/0* from DHCP client to a fixed IP address as follows. In this example, we assume a private network since the IP address changes to 172.16.1.100 with netmask of 255.255.255.0.

1. Select the context IP mode to configure an IP interface.

```
2803/K/EUI(cfg)#context ip router
2803/K/EUI(ctx-ip)[router]#
```

2. Set your IP address and network mask on the WAN IP interface *eth0*. (Contact your network administrator if you are not sure what IP address to set.)

```
2803/K/EUI(ctx-ip)[router]#interface eth0
2803/K/EUI(if-ip)[eth0]#ipaddress 172.16.1.100 255.255.255.0
172.16.1.100(if-ip)[eth0]#
```

3. Store this modified configuration and make it your new start-up configuration. On the next start-up the system will come up using the modified configuration.

```
172.16.1.100(if-ip)[eth0]#copy running-config startup-config
172.16.1.100(if-ip)[eth0]#
```

Now the IPLink can be connected to your IP network. Remember that if *Eth 0/0* remains as a DHCP client, it gets the IP address from your IP network's DHCP server. If you changed the IP address as we showed in this example, it assumes your IP network (actually Ethernet segment) is on the same subnet, 192.16.1.0/24.

3.0 Connecting to the network

Connect the IPLink to the IP network (see **figure 2**) and do any remaining configuration from a PC connected to the same Ethernet segment.

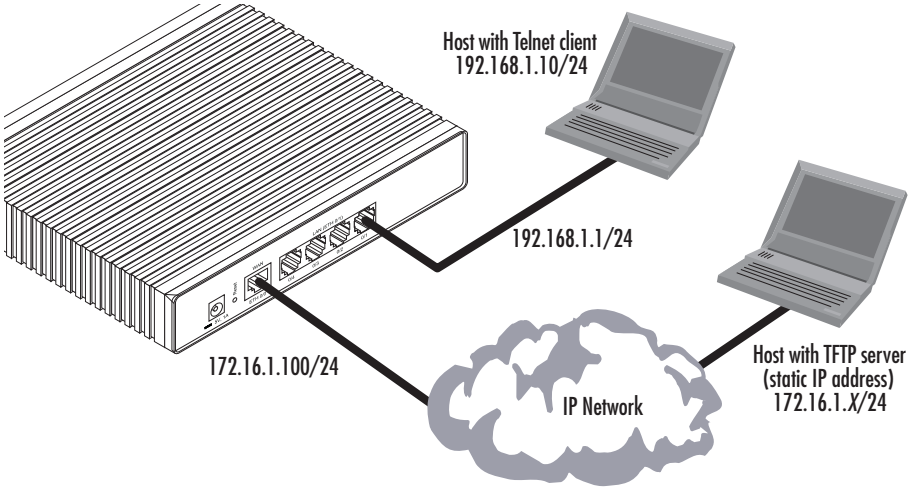

Figure 2. Connecting to a host

You can check the connection with the ping command. For example shown in **figure 2**, you would ping 172.16.1.100 from a PC on the IP network.

You may now start to configure the IPLink using the CLI commands. For a detailed description of the CLI refer to the getting started guide (GSG) available on the CD-ROM and online at **www.patton.com**.

4.0 Connecting the IPLink serial port

If your IPLink is equipped with a serial WAN port, connect it to the appropriate DCE. The IPLink 2800 Series is available with the following serial interfaces:

- V.35 (DB-25)—Model 2835
- X.21 (DB-15)—Model 2821
- E1 (RJ48C or dual coaxial connectors)—Model 2803/K
- T1 (RJ48C)—Model 2803/T

For the V.35 and X.21 serial ports, do the following to connect the serial cable to the IPLink:

1. Attach the male connector of the serial cable to the female serial connector on the router.
2. Attach the other end of the cable to the serial connector on local serial modem or multiplexer device.

Note The router's V.35 interface is wired as a DCE. No DTE configuration is possible. If you are directly connecting the router's V.35 interface to third-party equipment that cannot be configured as a DTE, you must use a tail-circuit cable. You can purchase a tail-circuit cable from a datacom-supply vendor. A tail-circuit cable will cross-over the necessary V.35 signals so that the two DCE interfaces can communicate.

Note The router's X.21 interface is wired as a DCE. No DTE configuration is possible. The router's X.21 interface requires a cable with a male DB-15 connector.

For the IPLink's T1/E1 WAN port, connect to an E1 service as follows:

1. Your incoming E1 connection will be either a twisted pair cable terminated with an RJ48C plug or two coaxial cables. (T1 is RJ48C only.)
   - If an RJ48C plug, plug the cable into the RJ48C connector between the two coaxial connectors on the rear of the IPLink.
   - If two coaxial cables, plug the coaxial cables into the RX and TX connectors on the rear of the IPLink. The RX is an input and the TX is an output.
2. The T1/E1 port default is disabled. Enable the T1/E1 port.

```
2803/K/EUI(if-ip)[eth0]#exit
2803/K/EUI(ctx-ip)[router]#exit
2803/K/EUI(cfg)#port e1t1 0 0
2803/K/EUI(prt-e1t1)[0/0]#no shutdown
2803/K/EUI(prt-e1t1)[0/0]#show port e1t1 0 0
...
```

The configuration of the enabled T1/E1 port is displayed. The defaults for the E1 are Master clocking, Line Code HDB3, Framing CRC4, Impedance 120 Ohms. This is for connecting to the RJ48C.

For modifying the T1/E1 port configuration, consult the *IPLink Software Configuration Guide* on the Patton website: **www.patton.com/manuals.**

5.0 Additional information

For detailed information about configuring and operating guidance, set up procedures and troubleshooting, refer to the *IPLink Getting Started Guide* on the enclosed Patton CD-ROM or at **www.patton.com/manuals**. On the CD-ROM you will also find numerous freeware and shareware tools, including TFTP servers, Telnet clients, etc.

6.0 EC Declaration of Conformity

Product Description: IPLink 2802, IPLink 2803, IPLink 2805, IPLink 2821, IPLink 2823, and IPLink 2835.

We certify that the apparatus identified above conforms to the requirements of Council Directive 1999/5/EC on the approximation of the laws of the member states relating to Radio and Telecommunication Terminal Equipment and the mutual recognition of their conformity.

The safety advice in the documentation accompanying this product shall be obeyed. The conformity to the above directive is indicated by the CE sign on the device.

The safety advises in the documentation accompanying the products shall be obeyed. The conformity to the above directive is indicated by the CE sign on the device.

The signed Declaration of Conformity can be downloaded from **www.patton.com/certifications/**.

Copyright statement

Copyright © 2005–2006, Patton Electronics Company. All rights reserved.

The information in this document is subject to change without notice. Patton Electronics assumes no liability for errors that may appear in this document.

Trademarks statement

The term *IPLink* is a trademark of Patton Electronics Company. All other trademarks presented in this document are the property of their respective owners.

Patton support headquarters in the USA

- Online support: Available at **www.patton.com**
- E-mail support: E-mail sent to **support@patton.com** will be answered within 1 business day
- Telephone support: Standard telephone support is available five days a week—from **8:00 am** to **5:00 pm EST** (**1300** to **2200 UTC/GMT**)—by calling **+1 (301) 975-1007**
- Support via VoIP: Contact Patton free of charge by using a VoIP ISP phone to call **sip:support@patton.com**
- Fax: **+1 (253) 663-5693**

Alternate Patton support for Europe, Middle East, and Africa (EMEA)

- Telephone support: Standard telephone support is available five days a week—from **8:00 am** to **5:00 pm CET** (**0900** to **1800 UTC/GMT**)—by calling **+41 (0)31 985 25 55**
- Fax: **+41 (0)31 985 25 26**

Note For additional service and support information, refer to the "Contacting Patton for assistance" chapter of the *IPLink 2800 Series Getting Started Guide* located on the CD-ROM that came with your IPLink Router or available online at **www.patton.com**.

Warranty, Compliance Information

For warranty, trademark and compliance information, refer to the *IPLink 2800 Series Getting Started Guide* located on the CD-ROM that came with your VPN Router or available online at **www.patton.com**.

CAUTION

Ultimate disposal of this equipment must be handled according to all applicable national laws and regulations.